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THE EFFECTS OF PRE-SERVICE LEGAL ENCOUNTERS ON FIRST-TERM UNSUITABILITY ATTRITION IN THE U.S. NAVY

by

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March 1996

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THE EFFECTS OF PRE-SERVICE LEGAL ENCOUNTERS ON FIRST-TERM UNSUITABILITY ATTRITION IN THE U.S. NAVY

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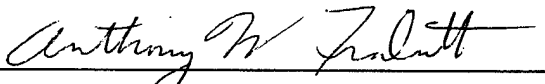
Author: 

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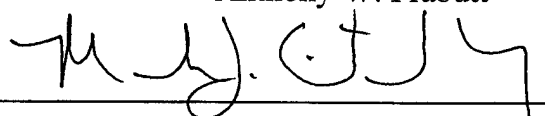
Approved by: 

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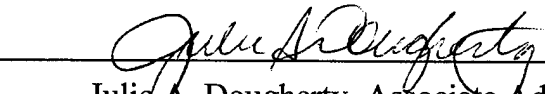

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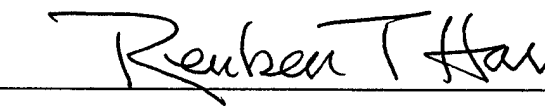

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The purpose of this thesis is to examine whether an individual's arrest record affects his or her likelihood of being discharged for unsuitability during the first term of enlistment in the Navy. This study focuses on California recruits who entered the Navy between 1982 and 1989. California arrest records and Department of Defense cohort data files were combined and examined using cross-tabulations and regression analysis. The merged data permitted the identification of persons who entered the Navy with a disclosed arrest record (and moral waiver) as well as those who enlisted with an arrest record (likely concealed) but no moral waiver. The results suggest that a large portion of unsuitability attrition from the Navy may be attributable to the enlistment of persons who have a pre-service arrest record. The findings also show that many enlistees with a pre-service arrest history failed to receive a moral waiver that matched the offense. It is recommended that steps be taken to access criminal records maintained by the states, in an effort to reduce unsuitability attrition.

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I. INTRODUCTION

A. PROBLEM

A substantial amount of research has been conducted on first-term attrition in the United States Navy. The proper screening of recruits is not only essential in maintaing a high quality force, it is also essential in preventing substantial losses of time and money that result from selecting recruits who are unable to complete their obligated term of enlistment. Successful completion of a recruit's contractual obligation is often determined by his or her ability to adjust and conform to the demands of a military lifestyle.

The Navy uses several methods to evaluate recruits in the hope of selecting persons who are more likely to complete their initial term of service. An individual's Armed Forces Qualification Test (AFQT) score, high school diploma status, and moral character are among the factors used to evaluate an applicant for enlistment in the Navy. Recruiters have access to an applicant's AFQT score and high school record, but a prospective recruit's moral character is not as easy to determine.

The military bases its evaluation of moral character primarily on whether or not an applicant for enlistment has been arrested, used drugs, or violated the laws in some other way. The accuracy of the information the recruiter receives on a prospective recruit often can and should be questioned. To what degree are applicants for enlistment, who may have potentially disqualifying behavioral histories, hiding their background from recruiters? Does a person's moral character play an important role in determining first-term attrition, and, if so, should a person's criminal record be made available to the recruiter? These are questions that must be examined to better understand and control the Navy's attrition problem.

B. BACKGROUND

All branches of the United States military require that potential recruits meet a certain level of moral standards for entry into service. If an individual is identified as having an unacceptable pattern of criminal or personal behavior, including drug or alcohol abuse, the individual may be rendered ineligible for recruitment. There are many reasons for this. First, research shows that recruits who have a history of criminal behavior are more likely to create disciplinary problems, and, thus, are more likely to receive unsuitability discharges (Wiskoff and Dunipace, 1988, and Fitz and McDaniel, 1988). Second, there is a belief that recruits of questionable character may adversely affect other recruits. Third, the military must be concerned with its public image. The attitude that the American public would have toward having a "criminal element" in the military could affect recruiting and retention. Parents of prospective recruits, for example, need to feel assured that their children are not living and working in the close company of "moral reprobates" or corrupting influences. Therefore, if an applicant for enlistment has a criminal history, he or she is required to undergo a special evaluation and obtain a moral waiver before gaining admission into the service.

Although the requirement to meet a certain level of moral standards is in place, following through on that requirement has proven difficult. One of the main obstacles faced by recruiters is that potential recruits with past criminal behavior are hard to identify. Applicants who have engaged in criminal behavior may not have been arrested or convicted for their past activities. According to Navy policy, "only offenses for which there is a conviction or adjudication, or which have been processed through a pre-trial intervention program require waivers" (COMNAVCRUITCOMINST 1130.8D CH-30, 1995, p. 1-I-2).

Assuming that applicants involved in criminal activities were arrested and convicted, the recruiters still need to discover that information. Efforts at discovery

are often hampered by the unwillingness of many local and state law enforcement agencies to disclose criminal records for recruiting purposes. This applies, in particular, to records on juvenile offenses, which may be protected by laws from outside access. Thus, the moral waiver process used by the military relies heavily on the willingness of the prospective recruit to voluntarily disclose any arrest history.

In the past, this was not always the case. Recruiters were required to conduct background checks on all potential recruits. This created extra work for the recruiters, and the payback was usually small due to the reluctance on the part of law enforcement agencies to provide information. As Flyer observed, "During 1986, recruiting policies were changed so that local agency checks would be conducted only for those applicants for enlistment who admitted to an arrest history, and who might require a moral waiver to enlist" (Flyer, 1995, pp. 4-5).

The lack of availability of criminal records has not only made enlistment screening more difficult, it has also limited research on the relationship between unsuitability attrition and preservice criminal behavior. Research in this area could create a better understanding of why the Navy's attrition rate remains high even though the quality of its recruits, in terms of high school education and AFQT scores, has improved.

Research may also clear up other important questions that surround the current moral waiver policy. The current policy is grounded in the notion that pre-service convictions--based on self-disclosure--are a good indicator of moral character for screening purposes. One may ask, however, if the Navy should be using an individual's arrest record as well as his or her convictions? A second, and perhaps more important question, is whether a person's arrest record or criminal conviction provides the best predictor of behavior while in the military.

As noted above, current Navy policy uses convictions instead of arrests to evaluate moral character. This holds well with the values of American society, whose

justice system is based on the concept of a person's innocence "until proven guilty." After all, an arrest does not equate to guilt. And so it follows that, if a person has never been found guilty of a crime, there is no reason to assume that the individual has broken the law.

The current waiver policy is also sound in granting moral waivers in some cases because committing a crime does not necessarily equate with low moral character. First, individual circumstances that may not reflect moral character can determine one's behavior. There may be economic or environmental factors that influence an individual's actions. Second, one must also take into account remorse, reform, or rehabilitation, which is an objective of the criminal justice system, as well as the fact that people "pay" for their crimes with legally-defined forms of punishment. These considerations are especially strong in juvenile cases where no clear pattern of criminal behavior or recidivism exists.

Yet, research may indicate that arrests, convictions, or both, are accurate indicators of an individual's likelihood to be discharged from the military. In reality, this may have nothing to do with determining a person's moral character. Perhaps, arrests or convictions indicate something else, such as an indiviual's inability to cope with the discipline and structure of a military lifestyle.

Previous research concerning moral waivers and its effectiveness as a screening tool may be largely invalid if a number of waivered or non-waivered recruits had a hidden criminal history in their background. By using actual arrest records, provided by state authorities--as opposed to self disclosure--one can determine the actual backgrounds of all recruits and study the effect these backgrounds may have on unsuitability attrition, and attrition as a whole, from the military.

C. OBJECTIVES AND SCOPE

The objective of this thesis is to examine whether there is any correlation between a recruit's previous criminal background and his or her likelihood of

unsuitability attrition in the United States Navy. It is hypothesized having a preservice legal encounter (PLE) correlates positively with an increased likelihood of unsuitability attrition. It is also hypothesized that recruits with a felony background are more likely to be discharged for unsuitability than are those with lesser offenses.

This analysis examines all California recruits who entered the United States Navy between 1982 and 1989. Although total attrition may be addressed to some degree in the study, the main focus is on first-term unsuitability attrition.

D. SUMMARY OF CHAPTERS

This thesis is organized into five chapters. The next chapter offers a review of literature on moral waivers and unsuitability attrition in the military. Chapter III describes the data and methodology used in the study. The study results are then presented in Chaper IV. Chapter V provides a summary of the findings, conclusions, and recommendations based on the study.

II. LITERATURE REVIEW

As part of the recruitment process, all branches of the military are interested in the pre-service criminal history of prospective recruits. In the past, recruiters did not rely on the willingness of applicants to disclose their criminal arrest history. Local law enforcement agency checks were conducted on all applicants. Recruiting policies have been changed, however, causing recruiters to rely on self-disclosure from prospective recruits.

Previous research has examined the relationship between one's criminal history and unsuitability discharges. Unsuitability discharges include personnel discharged prior to completion of their first term of enlistment under interservice separation codes (ISCs) 60 through 87 and 101-102. These codes are defined by the Department of Defense and indicate the primary reason for separation from the military. Recent research has focused on the relationship between pre-service arrests and first-term attrition (Flyer, 1995). "Attrition" is typically defined in the military as the separation or discharge of a person, for any reason, prior to the completion of the first term of enlistment. The purpose of the more recent research is to determine if the pre-service arrest histories of recruits can be used as an enlistment screening tool to determine recruit quality.

By screening applicants for moral character, the Services should be able to screen out individuals who would most likely experience behavioral problems, leading to a decline in unsuitability attrition. Unsuitability attrition is usually thought of as attrition resulting from the failure of a recruit to meet minimal behavioral or performance standards. If an individual has a criminal history, or has displayed behavioral problems in the past, screening for moral character is justified because a person's past performance may be indicative of how he or she may act in the future. Moral waivers are necessary because people make mistakes in the past, and these

mistakes may not necessarily reflect a character flaw. Mistakes made in one's youth may strengthen one's character, depending on the ability to reform. If the Service has a good moral waiver system, unsuitable individuals will be screened out and unsuitability attrition should decline.

Means (1983) reviewed the moral waiver system, examining the relationship between moral waivers and attrition. She analyzed data on non-prior service accessions for all branches of the military for fiscal years 1980 through 1982. In her analysis, she focused on the relationship between moral waivers and attrition as a whole, not just unsuitability attrition. She concluded that "accessions on moral waivers are not much more likely than non-waiver accessions to be separated from service for failure to meet behavioral or performance standards" (Means, 1983, p. 40). She went on to argue that the determination of moral fitness should be separated from performance prediction (Means, 1983, p. 45).

Fitz and McDaniel (1988) also examined the use of the moral waiver system as a predictor of attrition; however, their analysis focused specifically on unsuitability attrition. Their population included all fiscal year 1982 military accessions, excluding cases as necessary for problematic reasons. Their analysis suggested that accessions who require moral waivers are more likely to receive unsuitability discharges than are those who do not receive moral waivers (Fitz and McDaniel, 1988, p. 59).

Much of the analysis by Fitz and McDaniel (1988) focused on misdemeanor waivers, since they were the most frequent type of waiver in all Services except the Marine Corps. The Marine Corps typically accepts a large number of recruits who require waivers for multiple traffic offenses, which were found to be unrelated to unsuitability discharges. Aptitude test scores were found to moderate the relationship between misdemeanor waivers and unsuitability discharges in both the Army and Navy. Additionally, the relationship between misdemeanor waiver status and

unsuitability discharges was stronger for blacks than for whites in both of these Services (Fitz and McDaniel, 1988, p. 59).

As noted above, Fitz and McDaniel's (1988) concluded that individuals receiving moral waivers are more likely to receive unsuitability discharges. This could have an impact on security issues. One can argue that, if people who receive moral waivers are more likely to be discharged prematurely, the military would want to avoid assigning individuals with moral waivers to sensitive, high-security jobs.

Wiskoff and Dunipace (1988) expanded the research of Fitz and McDaniel (1988) by tying the relationship between moral waivers and unsuitability discharges to suitability for high-security jobs. Their study population consisted of non-prior service personnel in all branches of the military entering during fiscal years 1980 through 1982.

To examine the relationship between moral waivers and unsuitability discharges, Wiskoff and Dunipace (1988) categorized individuals by Armed Forces Qualification Test (AFQT) score, education, participation in the Delayed Entry Program (DEP), and primary service occupation. They found that about 70 percent of individuals who received a moral waiver, and were assigned to a sensitive occupation, were in the upper-half of the AFQT distribution. They also found that, in looking at personnel in the security occupations, those individuals with a moral waiver were more likely to have a high school diploma than were their counterparts who enlisted without a waiver. This indicates that "the services are willing to take some risks in accessing personnel, i.e., moral waivers without high school diplomas, if the personnel have higher aptitude levels" (Wiskoff and Dunipace, 1988, pp. 9-10).

Wiskoff and Dunipace found that a higher percentage of non-waivered personnel entered the military through the DEP when compared with those who received a moral waiver. At the same time, waivered personnel who entered the military through the DEP also tended to remain in the DEP for a shorter period of

time than did non-waivered people. The authors thus conclude "that moral waivers may have been utilized by the services to fill immediate manpower needs" (Wiskoff and Dunipace, 1988, pp. 12-14).

Perhaps the most significant finding in the Wiskoff and Dunipace (1988) study is that first-term unsuitability rates tend to correlate more strongly with high school graduation status than with a person's moral waiver status. This has important implications for the military assignment process, suggesting that non-high school graduates, whether waivered or not, should not be assigned to a high-security occupation, or other position with a high training cost, since these people tend to have a relatively high attrition rate (Wiskoff and Dunipace, 1988, p. 20).

Until recently, research has focused on the relationship between moral waivers and unsuitability attrition. Receiving a moral waiver was used as a proxy for having a criminal history, since it was so difficult to obtain criminal history files on prospective recruits. In reality, there are many enlistees in the military today with a concealed criminal history. To better determine the relationship between criminal history and unsuitability discharges, one should try to obtain data on criminal records from local and state law enforcement agencies. Although states tend to bar access to arrest records for recruitment purposes, especially when the records involve underage or juvenile offenders, some states have been willing to provide this information for research purposes.

Flyer (1995) was able to obtain adult and juvenile arrest records from several states. He used criminal history data from the states of Florida, Illinois, and California to examine the relationship between an enlistee's arrest history and his or her likelihood of receiving an unsuitability discharge. These data better identify individuals with a criminal history, as Flyer notes in the following:

> Based on moral waiver and ENTRANCE information available in enlistment and investigative files, about 14 percent of all new recruits

> can be identified as having an arrest history. The rate more than doubles when official records from state juvenile and adult criminal history record repositories are taken into account. Generalizing from the California study, at least 30 percent of all recruits entering military service have an arrest record (Flyer, 1995, p. 55).

Flyer (1995) divides his research into three separate analyses. He first looks at recruits with a Florida juvenile offense history, followed by a study of recruits with an Illinois adult arrest history, and he concludes with an analysis of California recruits who have either an adult or juvenile arrest history. In his research, he tends to focus on arrest histories because "the arrest itself is considered by many criminologists to be a more important indicator of criminal activity than the disposition of the arrest..." (Flyer, 1995, p. 27). This led him in some instances to combine data on disposition of charges (not filed; filed, no convictions; and convictions) into a single category for analytical purposes (Flyer, 1995, p. 27). Since moral waivers are generally required only for individuals who have convictions, the results of his analysis may differ from those of previous studies.

In fact, Flyer's results pertaining to the behavior of persons on active duty were substantially different than those of previous studies. Flyer found that recruits who possessed a pre-service arrest history were 65 percent more likely than other recruits to receive an unsuitability discharge. Additionally, he points out that the difference in unsuitability attrition rates for recruits with a moral waiver is about half that of recruits with a pre-service arrest record (Flyer, 1995, p. 58). He found little difference in the unsuitability attrition rates of persons who were convicted and those who were arrested but had the charges dropped. He concludes from this that "recruits with a pre-service arrest history, regardless of the outcome of the judicial process following the arrests, are much poorer risks for enlistment than other recruits" (Flyer, 1995, p. 62).

As one reviews the prior research, many questions arise pertaining to the methods and definitions used in obtaining results. As in any research, the results are highly related to the questions posed. How one selects a methodology or defines key terms plays an important role in analyzing a study's results. Two key areas that one must focus on in understanding the relationship between "unsuitability discharges" and "criminal history" are the terms themselves. These terms will be defined in the "Key Variable Definition" section of Chapter III.

III. DATA AND METHODOLOGY

A. DATA

Two sources of data were used to analyze the effects of an individual's behavioral background on first-term unsuitability attrition. The first source was Department of Defense enlisted personnel data files. The second source was criminal arrest records files from the state of California. Both data files were obtained from the Department of Defense Manpower Data Center (DMDC) in Monterey, California.

The DMDC enlisted personnel data files were obtained for recruits entering the Navy from the state of California from October 1982 through September 1989. These files track the careers of active-duty enlisted personnel, provide demographic background information, and provide personnel loss actions through September 1994.

The DMDC California arrest records file includes the arrest records of persons prior to their enlistment, or pre-service, during their term of service, and after completion of their term of service. It is important to note that arrests occurring in other states would not be included in this data file. Therefore, there may be a small number of enlistees whose arrest history, or some portion of it, may remain undisclosed. This may result in a more conservative estimate of the number of people entering the Navy with an arrest history in their background.

Data from the two files were matched by the State of California Bureau of Criminal Statistics using a combination of several personal identifiers and characteristics (name, social security numbers, date of birth, race, sex, weight, and height). Social security numbers and names were removed from the file returned to DMDC to protect the privacy of individuals in the sample. California identification numbers replaced the social security numbers, allowing researchers the ability to distinguish observations and merge data from the two files. The data used for this study were subsequently restricted in the following manner: no prior military service, and two

through six-year terms of enlistment only. The restricted data set, consists of 48,300 enlisted personnel, 42,364 (88%) of whom are men and 5,936 (12%) are women.

B. KEY VARIABLE CREATION

Several variables that are used in this analysis were generated by combining variables in the two data sets. Although California criminal records are provided for all of the recruits, some recruits have a criminal record from another state that would not show up on the California arrest records. In some cases, these individuals can be identified because they received a moral waiver to enter the Navy. To account for everyone with a possible criminal history, a preservice legal encounter (PLE) variable was created.

The PLE variable designates individuals with either a California arrest record or a moral waiver as an individual with a preservice legal encounter. The term PLE is used to describe these individuals, because the arrest records do not indicate final disposition of the case. It is not known whether the individuals were ever convicted of the crime for which they were arrested. However, one can identify individuals who were arrested and released without charges being filed. Since the moral waiver system focuses on convictions as opposed to arrests, this study likewise centers on convictions. Personnel arrested and released without being charged were classified as <u>not</u> having a PLE.

Another consideration in designing the PLE variable involved minor traffic offenses. For the purpose of this study, minor traffic offenses were not considered as displaying criminal behavior, and are not included in the definition of having a PLE. Based on these restrictions, 16,177 personnel in the sample--or 33.5 percent of the total population of 48,300--were categorized as having a PLE. Table 1 shows the original population and how it was subsequently redefined into subpopulations.

Table 1. Sample Population by Pre-Service Legal Encounter and Gender

Gender	PERCENTAGE (AND NUMBER) OF RECRUITS*					
	Pre-Service Legal Encounter (PLE)					
	Hidden Felonies	All Felonies	Hidden Misdemeanors	All Misdemeanors	All PLEs	Total Recruits
Male	7.0 (3,372)	7.1 (3,441)	5.2 (2,497)	24.5 (11,835)	31.6 (15,276)	87.7 (42,364)
Female	0.1 (70)	0.2 (73)	0.4 (200)	1.7 (828)	1.9 (901)	12.3 (5,936)
Total	7.1 (3,442)	7.3 (3,514)	5.6 (2,697)	26.2 (12,663)	33.5 (16,177)	100.0 (48,300)

[a]Percentage of total is calculated as follows: The number of personnel in each category divided by the number of people in the original sample (48,300).

Source: Derived from data provided by the Defense Manpower Data Center.

Variables to designate individuals with a felony background (FELONY) and a misdemeanor or other offense background (MISDEM) were created using the same criteria employed in defining the PLE variable. Personnel in the felony category may not have been convicted of a felony, but felony charges were sought. Personnel in the misdemeanor and lesser offenses category include individuals who were either convicted of a misdemeanor or of a lesser charge, had misdemeanor or lesser charges sought, or received a drug waiver (even though their drug use may not have resulted in a previous legal encounter). As a result, 3,514 personnel were classified as FELONY and 12,663 personnel were classified as MISDEM.

Realizing that there may be differences between people who disclose their background and those who hide it, a variable was created to categorize persons with hidden records. The hidden (HIDDEN) variable contains individuals who are included in the PLE category but did not receive moral waiver that matched his or her

her arrest record. This variable should be viewed with caution. Since a conviction is typically necessary to require a moral waiver, individuals who were arrested and not convicted would fall into the "hidden" category even though they may not have intended to conceal their record. This variable was created because it could be used to measure the unsuitability discharge rate of individuals whose arrests are hidden, given the constraints of the current Navy recruiting system. A total of 6,139 recruits are categorized as HIDDEN, 3,442 whom are from the FELONY category and 2,697 from the MISDEM category.

A variable to identify individuals receiving an unsuitability discharge (UNSUIT) was also created. Unsuitability attrition is operationally defined as those personnel who were discharged prematurely (without completing their initial term of enlistment) under interservice separation codes 60 through 87 and 101 through 102. If the individual received an unsuitability discharge following the first term of service in the Navy, he or she was not included in the UNSUIT variable. In the data set, 12,535 recruits--representing 26 percent of the total population of 48,300--received an unsuitability discharge during the first term.

C. METHODOLOGY AND MODEL

This study was conducted in two parts. First, an analysis was performed focusing on unsuitability discharge rates of recruits (those with a pre-service legal encounter, or PLE, and those with no PLE) by selected demographic characteristics and occupational areas. In addition, logit multivariate regressions (probability models) were used to analyze the relationship between preservice legal encounters and unsuitability attrition. The following logit models were used:

1. UNSUIT= f (MALE BLACK HISPANIC OTHMIN HSDIPLOM AFQTPCT AGEENTRY MARRIED NUMDEPEN FELONY MISDEM)

2. UNSUIT= f (MALE BLACK HISPANIC OTHMIN HSDIPLOM AFQTPCT AGEENTRY MARRIED NUMDEPEN SEAMNSHP EEREPAIR COMINTSP HLTHCARE TECHSPEC SUPADMIN NONOCC CRAFTMEN SERVSUP FELONY MISDEM)

A complete list of these variables can be found in Table 2.

Below is a discussion of the variables used in the model and the expected effect of each variable on the dependent variable UNSUIT:

1. **MALE**. This is a dummy variable where 0 represents a female enlistee and 1 represents a male enlistee. Previous research has shown that attrition rates are lower for women than men (Fitz and McDaniel, 1988, p. 18). This variable is expected to have a positive effect on the variable UNSUIT.

2. Race/Ethnicity is divided into four categories: white, black, Hispanic, and other minorities. Previous research on the effect of minority status is contradictory. Some research shows that blacks and Hispanics have a higher rate than whites of completing their first term of enlistment (Cooke & Quester, 1992, p. 224). However, other research has shown that blacks have a greater attrition rate than whites and others in the first three months of service (Gardner, 1980, p. 67). The following Race/Ethnicity variables are used in the logit model:

BLACK. This is a dummy variable where 0 represents a non-black enlistee and 1 represents a black enlistee. The effect of this variable is unclear and may have a positive or negative effect on the variable UNSUIT.

HISPANIC. This is a dummy variable where 0 represents a non-Hispanic enlistee and 1 represents a Hispanic enlistee. This variable is expected to have a negative effect on the variable UNSUIT.

OTHMIN. This is a dummy variable where 1 represents an American Indian, Alaskan Native, Asian/Pacific Islander and all other minority enlistees that are not included in the Black and Hispanic categories. A 0 represents enlistees that do not

not fall into the other minority category. This variable is expected to have a negative effect on the variable UNSUIT.

Table 2. List of LOGIT Variables and Definitions

VARIABLE NAME	VARIABLE DEFINITION
UNSUIT	Received unsuitability discharge prior to completion of first-term of service
MALE	Gender is male
BLACK	Race/Ethnicity is Black
HISPANIC	Race/Ethnicity is Hispanic
OTHMIN	Race/Ethnicity is American Indian, Ala skan Native, Asian/Pacific Islander, or other minority
FELONY	Pre-service felony history
MISDEM	Pre-service misdemeanor history
HIDDEN	Hidden criminal history
HSDIPLOM	Received a high school diploma
AFQTPCT	Armed Forces Qualification Test score percentile
AGEENTRY	Age at entry into Navy
MARRIED	Marital Status
SEAMNSHP	Job Category: Seamanship
EEREPAIR	Job Category: Electronic Equipment Repair
COMINTSP	Job Category: Communication & Intelligence Specialist
HLTHCARE	Job Category: Healthcare
TECHSPEC	Job Category: Technical & Allied Specialist
SUPADMIN	Job Category: Functional Support & Administration
NONOCC	Job Category: Non-occupational
CRAFTMEN	Job Category: Craftsman
SERVSUP	Job Category: Service & Supply Handler

3. For this model, an individual's preservice offense history is described either as a felony offense, or a misdemeanor or lesser offense. Previous research on moral waivers has shown that individuals with moral waivers are more likely to be discharged from the military before completing their first term of enlistment (Means, 1983, p. 28); and they are also more likely to receive unsuitability discharges (Fitz and McDaniel, 1988, p. 59). Additionally, research using arrest records has shown that recruits with arrest records are more likely to be discharged for unsuitability (Flyer, 1995, p. 58). The following preservice offense variables are used in the logit model:

FELONY. This is a dummy variable where 0 represents an enlistee that has no previous legal encounters classified as a felony and 1 represents an enlistee that has previous legal encounters classified as a felony. Table 3 lists criminal offenses classified by the Navy as a felony. It is expected that this variable will have a positive effect on the variable UNSUIT.

MISDEM. This is a dummy variable where 1 represents an enlistee that has a previous legal encounter classified as a misdemeanor or as any other non-felony legal classification. A 0 represents an enlistee not included in the misdemeanor or other non-felony categories. It is expected that this variable will have a positive effect on the variable UNSUIT.

4. **HIDDEN**. This is a dummy variable where 0 represents enlisted recruits with no pre-service legal encounters, or individuals with pre-service legal encounters and a moral waiver. A 1 represents enlisted recruits who have a history of pre-service legal encounters but did not disclose that history or obtain a moral waiver. One might expect this variable to have a positive effect on the variable UNSUIT since subsequent discovery of hidden offenses would lead to an unsuitability discharge.

Table 3. Criminal Offenses Classified by the Navy as a Felony

LIST OF FELONIES
1. Accessory before or after the fact of a felony
2. Aggravated assault; assault with dangerous weapon; assault, intentionally inflicting great bodily harm; assault with intent to commit felony
3. Arson
4. Attempt to commit a felony
5. Breaking and entering with intent to commit a felony
6. Bribery
7. Burglary
8. Carnal knowledge of female under 16
9. Cattle rustling
10. Car jacking
11. Check, worthless, making or uttering, with intent to defraud or deceive (over $500)
12. Concealing knowledge of a felony
13. Conspiring to commit a felony
14. Criminal libel
15. Extortion
16. Forgery; knowing, uttering, or passing forged instruments
17. Graft
18. Grand larceny; embezzlement (value over ($500)
19. Housebreaking
20. Indecent acts or liberties with a child under 16
21. Indecent assault
22. Kidnapping; abduction
23. Mail matters: abstracting, destroying, obstructing, opening, secreting, stealing, or taking
24. Mails: depositing obscene or indecent matter in
25. Maiming; disfiguring
26. Manslaughter
27. Murder
28. Pandering
29. Narcotics, dangerous drugs or marijuana: possession or use
30. Perjury; subordination of perjury
31. Possession of controlled substance
32. Public record: altering, concealing, destroying, mutilating, obliterating, or removing
33. Rape
34. Robbery
35. Sedition; solicitation to commit sedition
36. Selling or leasing weapons to minors
37. Sodomy
38. Stolen property, knowingly receiving (value over $500)
Note: It would be impracticable to prepare an all inclusive list of felonies for all states. The above list is intended as a guide. Offenses of comparable seriousness should be treated as felonies. In doubtful cases, the following rule should be applied: if the maximum confinement under the law exceeds one year, the offense should be treated as a felony.

Source: COMNAVCRUITCOMINST 1130.8D, CH-30, 1995, p. 1-I-12.

5. **HSDIPLOM**. This is a dummy variable where 0 represents an enlistee with no high school diploma and 1 represents an enlistee with a high school diploma. Previous research has shown that "high school diploma graduates have markedly lower attrition rates than non-graduates" (Buddin, 1984, p. 24). This variable is expected to have a negative effect on the variable UNSUIT.

6. **AFQTPCT**. This is a variable representing the enlistee's Armed Forces Qualification Test score percentile. Previous research has shown that "those in higher mental categories are less likely to receive unsuitability discharges" (Fitz and McDaniel, 1988, p. 13). This variable is expected to have a negative effect on the variable UNSUIT.

7. **AGEENTRY**. This is a variable representing the enlistee's age upon entering the Navy. Previous research has shown that attrition increases "about 1 percentage point per year for each year at enlistment beyond age 17" (Buddin, 1984, p. 24). This variable is expected to have a positive effect on UNSUIT.

8. **MARRIED**. This is a dummy variable where 0 represents a single enlistee at time of entry and 1 represents a married enlistee at time of entry. Previous research has shown that individuals with dependents have a higher attrition rate than their counterparts without dependents (Griffin, 1981, p. 13). This variable is expected to have a positive effect on UNSUIT.

9. **NUMDEPEN**. This variable is a variable representing the number of dependents a recruit has at time of entry into the Navy. This variable is expected to have a positive effect on UNSUIT as suggested by previous research.

10. The Navy places personnel into the following nine job occupation categories, based on Department of Defense definitions: Seamanship (SEAMNSHP), Electronic Equipment Repair (EEREPAIR), Communication & Intelligence Specialist (COMINTSP), Healthcare (HLTHCARE), Technical & Allied Specialist (TECHSPEC), Functional Support & Administration (SUPADMIN), Equipment

Repair (EQREPAIR), Craftsman (CRAFTMEN), Service Supply & Handler (SERVSUP), and Non-Occupational (NONOCC). The Non-Occupational category tends to be the largest of these categories since it includes personnel who are in the military's vast training "pipeline".

Since a large number of personnel are discharged during periods of training, they never get formally classified into one of the job categories. In the logit model used here, the equipment repair category is the base case. The eight other categories are dummy variables where 0 represents an individual not in the category and 1 represents an individual in that particular category. The non-occupational variable (NONOCC) is expected to have a positive impact on the variable UNSUIT. The reason for this is two-fold. First, previous research has shown that first-term completion rates are lower for "recruits who entered the Navy without a promise of specialty schooling for a Navy occupation" (Cooke and Quester, 1992, p. 244). Second, the non-occupational category contains personnel who were discharged during boot camp and subsequent training, and since most early discharges tend to occur during these periods, this category will have the highest percentage of personnel who are more likely to leave the Navy before completing their obligated first term of enlistment. The impact of the remaining seven variables may be either positive or negative.

IV. RESULTS

This chapter first analyzes the descriptive data through the use of cross-tabulations. It begins by examining the effects of pre-service legal encounters (PLEs) on unsuitability attrition from a broad perspective and then focuses on selected demographic characteristics. These characteristics include AFQT categories, high school diploma status, and race/ethnicity categories. An examination of unsuitability attrition by job category is also included. The chapter concludes with a discussion and analysis of the logit model results.

A. GENERAL OBSERVATIONS

Of the 48,300 recruits entering the Navy from the state of California between 1982 and 1989, 16,177 (33 percent) had a background containing at least one PLE (See Table 1). Of those with a PLE, 3,514 (22 percent) had a background containing a felony history and 12,663 (78 percent) had a misdemeanor or lesser offense.

The number of recruits with a PLE seems high when one considers that the Navy is trying to improve the quality of its recruits. This can best be explained by reviewing the disclosure status of recruits with a PLE. The problems may be the Navy's inability to identify the arrest histories of its recruits. In examining the data, one finds that 6,139 recruits, almost 38 percent of those with a PLE, entered the Navy without obtaining a moral waiver that matched his or her arrest history. The apparent lack of disclosure is predominantly found among recruits with felony backgrounds. Of the 3,514 PLEs with a felony background, only 72 (2 percent) received a felony-level waiver. This means that as many as 98 percent of recruits with a felony background may have entered the Navy without disclosing their background during the recruitment phase. Since final disposition of the arrest is unknown, it is possible that, in some cases, the arrests were revealed but no moral waiver was required because the prospective recruit was never convicted. It is also possible that the

prospective recruit may have revealed his or her background and it was concealed by the recruiter. In the cases where convictions did occur, if the Navy knew the background of these individuals, many of them may not have qualified for enlistment.

It is apparent that individuals with a history of legal problems are entering the Navy. But what effect, if any do recruits with a PLE have on levels of unsuitability attrition in the Navy? An examination of the data reveals that 12,535 recruits, 26 percent of the California sample in this study, received an unsuitability discharge before completing their first term of service. An additional 10.2 percent of this group were discharged for reasons other than unsuitability, making the total attrition rate 36.2 percent. This suggests that 71.8 percent of all first-term attrition results from unsuitability, making it one of the key factors to understand, and reduce, if the Navy's goal is to curtail attrition as a whole.

This study indicates that there are great differences between the unsuitability discharge rate for recruits with a PLE and those without a PLE. The first-term discharge rate is more than 15 percentage points higher for recruits with a PLE history; and the difference in discharge rates increases as the PLE history becomes more severe. For example, the discharge rate for individuals with a felony PLE history is almost 50 percent. This is about 30 percentage points higher than the discharge rate for recruits without a PLE history (21 percent).

Not only are the discharge rates higher for all recruits with a PLE history, but the percentage of unsuitability discharges involving recruits with a PLE history is especially steep. A total of 12,535 recruits in this study received an unsuitability discharge. The data show that 5,874 of these recruits had a PLE background. This means that almost 47 percent of all recruits who received an unsuitability discharge, in this study, also had a PLE history.

B. ARMED FORCES QUALIFICATION TEST (AFQT) CATEGORIES

During the recruitment process, the AFQT is used as a tool to measure the trainability of applicants for enlistment. This test is used as a "recruit quality indicator," since research has consistently shown that recruits with higher AFQT scores perform better and are less likely to receive early discharges than those with lower scores (Fitz and McDaniel, 1988, p. 13). Table 4 displays the distribution of California recruits with a PLE by AFQT Category. Examination of the table reveals that 65 percent of recruits with a PLE are in Category IIIA or above and 35 percent with a PLE are in Category IIIB and Category IV.

If recruits with a PLE are more likely to be discharged before completing their first term, one would prefer that these recruits possess other characteristics or attributes that would counterbalance or negate this increased likelihood, such as a higher AFQT score. If a recruiter is aware of the recruit's legal background, and other recruit quality indicators, such as AFQT, indicate that the recruit's chances for success are high, then a waiver may be sought. It is probably less likely that a recruit with a PLE and a relatively low AFQT score would receive a waiver, especially if the offense were severe or multiple.

It is not possible to determine the percentage of prospective recruits with a PLE, in each AFQT category, who received a waiver to enlist in the Navy because of incomplete data. The data only show information on applicants who were granted entry, not on those who were not. One would also need to know the number of prospective recruits with a PLE who were denied entry to determine such a percentage. However, some interesting observations can still be made. Of those recruits who disclosed a misdemeanor PLE and received a waiver, 76 percent were in Category IIIA or above. Of those recruits who disclosed a felony PLE and received a waiver, 68 percent were in Category IIIA or above.

Table 4. Number and Percentage Distribution of Recruits from California with a Pre-Service Legal Encounter (PLE) by Armed Forces Qualification Test (AFQT) Category and PLE Category, 1982-1989 Cohorts (Combined)

	PERCENTAGE DISTRIBUTION OF PLEs (AND NUMBER)		
AFQT Category	Felony	Misdemeanor	All PLEs
Category I	3.3 (115)	6.5 (818)	5.8 (933)
Category II	30.8 (1,084)	37.1 (4,698)	35.7 (5,782)
Category IIIA	25.0 (880)	22.6 (2,858)	23.1 (3,738)
Category IIIB	30.8 (1,082)	26.8 (3,400)	27.7 (4,482)
Category IV	10.0 (353)	7.0 (889)	7.7 (1,242)
Total	100.0 (3,514)	100.0 (12,663)	100.0 (16,177)

Source: Derived from data provided by the Defense Manpower Data Center.

If recruits with lower AFQT scores generally have more difficulty receiving a waiver, then one might expect to find more cases of undisclosed arrests among recruits in the lower AFQT categories. In fact, this is what is found: recruits with a PLE in Category IIIB and Category IV have a hidden PLE percentage level that is 9 percentage points higher than recruits with a PLE in Category IIIA and above--44 percent in the lower categories versus 35 percent in Category IIIA and above.

The same type of argument can be made for the severity of the PLE. If an applicant with a felony arrest is less likely to get a waiver than an applicant with a misdemeanor, then one would expect to see a larger percentage of felony PLEs that are hidden. And, indeed, there is a large difference between the disclosure rate of applicants with a felony PLE who gained entry into the Navy and those with a misdemeanor or lesser PLE who were allowed to enlist. Recruits with a felony PLE had a disclosure rate of 2 percent. Recruits with a misdemeanor or lesser PLE had a disclosure rate of 79 percent. This shows that recruits with a felony PLE have a hidden PLE percentage level that is 77 percentage points higher than those with a misdemeanor or lesser offense.

If recruiters were given accurate PLE history information, one would expect to see the percentage of recruits with a PLE in each AFQT category decrease in the lower categories. This decrease would follow the view that waivers would be given to recruits in the higher categories, that is, to those who were more likely to be successful based on this measure of aptitude or ability. Table 5 shows the percentage of PLE recruits in each of the AFQT categories. Although accurate PLE information is not given to recruiters, the percentage of PLEs decrease as AFQT scores decline--from a high of 37 percent in Category I to a low of 26 percent in Category IV.

The pattern is not quite as consistent, however, in the felony PLE category. The category with the lowest percentage of felony PLEs is Category I at 4.6 percent, while Category IV has the second highest percentage of felony PLEs at 7.5 percent. There are several possible explanations for this. The most obvious explanation is that recruiters do not have accurate information on the arrest records of applicants; therefore, individuals who may normally be denied entry are permitted to enlist. A second explanation is that individuals in our society who have relatively high test scores, may have had better opportunities in their life and are generally less likely to get into trouble with the law.

Table 5. Number and Percentage of Recruits from California by Armed Forces Qualification Test (AFQT) Category and PLE Status, 1982-1989 Cohorts (Combined)

AFQT Category	PERCENTAGE OF AFQT CATEGORY WITH PLE (AND NUMBER)				
	PLEs				
	Felony	Misdemeanor	Total	No PLE	Total
Category I	4.6 (115)	32.5 (818)	37.1 (933)	62.9 (1,582)	100.00 (2,515)
Category II	6.8 (1,084)	29.5 (4,698)	36.3 (5,782)	63.7 (10,156)	100.00 (15,938)
Category IIIA	8.5 (880)	27.7 (2,858)	36.2 (3,738)	63.8 (6,582)	100.00 (10,320)
Category IIIB	7.3 (1,082)	23.0 (3,400)	30.3 (4,482)	69.7 (10,309)	100.00 (14,791)
Category IV	7.5 (353)	18.8 (889)	26.2 (1,242)	73.8 (3,494)	100.00 (4,736)

Source: Derived from data provided by the Defense Manpower Data Center.

As we have seen, all AFQT categories have a fair number of recruits with a PLE background. A question that remains to be answered is whether recruits with a PLE background affect the Navy's unsuitability attrition rates. Table 6 displays the unsuitability discharge rate of recruits in each AFQT Category by different offense categories.

Examination of Table 6 reveals that, in every AFQT Category, the unsuitability discharge rate is highest for recruits with a felony offense. For example, in AFQT Category I, the unsuitability discharge rate for recruits with a felony offense is 15 percentage points higher than for recruits with no PLE history. In Category II through

Table 6. Unsuitability Discharge Rate of Recruits from California by Armed Forces Qualification Test (AFQT) Category and PLE Category, 1982-1989 Cohorts (Combined)

AFQT Category	PERCENT (AND NUMBER) DISCHARGED FOR UNSUITABILITY*			
	PLE History			No PLE History
	Felony	Misdemeanor	All PLEs	
Category I	30.4 (35)	22.4 (183)	23.4 (218)	15.7 (249)
Category II	47.3 (513)	29.3 (1,374)	32.6 (1,887)	19.4 (1,968)
Category IIIA	52.2 (459)	36.5 (1,042)	40.2 (1,051)	21.8 (1,433)
Category IIIB	51.2 (554)	34.8 (1,182)	38.7 (1,736)	21.6 (2,229)
Category IV	51.8 (183)	39.3 (349)	42.8 (532)	22.3 (782)

*Unsuitability discharge rate is calculated as follows: The number of personnel in each PLE and AFQT category who received an unsuitability discharge, divided by the number of personnel in that PLE and AFQT category.

Source: Derived from data provided by the Defense Manpower Data Center.

Category IV, the unsuitability discharge rates for recruits with a felony offense were 28 to 30 percentage points higher than for those with no PLE history.

Likewise, the unsuitability discharge rate for recruits with a misdemeanor or lesser offense is higher, in every AFQT category, than for those with no PLE history. These differences in unsuitability discharge rates between recruits with misdemeanor or lesser offense, and those with no PLE history, range from a low of about 7

percentage points (among Category I recruits) to a high of 17 percentage points (among Category IV recruits).

As a whole, recruits with any offense history make up a relatively large percentage of unsuitability discharges. Table 7 shows the percentages of unsuitability discharges by AFQT Category for California recruits who entered the Navy with an offense history. A high percentage of PLE recruits are unsuitability discharged regardless of AFQT Category.

C. HIGH SCHOOL DIPLOMA STATUS

Another "recruit quality indicator" used to evaluate an applicant for enlistment during the recruitment process is the individual's education level. As discussed previously, having a high school diploma increases the likelihood of a recruit completing his or her first term of enlistment. In a recruitment system whose goal is selecting people most likely to complete their first term, one might expect to see a higher percentage of PLEs among recruits who hold a high school diploma than among those who do not. Moral waivers are more likely to be granted if the recruit has other characteristics, such as a high school diploma, that may increase his or her likelihood of completing the first term of enlistment.

Table 8 displays the percentages of recruits in each PLE category by high school diploma status. It is interesting to note here that non-high school graduates have the largest percentage of recruits with a criminal offense history. The proportion of non-high school graduates (46.6 percent) with a criminal offense history is 15 percentage points higher than that of high school graduates (31.4 percent) with a criminal offense history.

Table 7. Number and Percentage of California Recruits with a Pre-Service Legal Encounter (PLE) Who Received an Unsuitability Discharge by Armed Forces Qualification Test (AFQT) Category and PLE Category, 1982-1989 Cohorts (Combined)

	PERCENTAGE OF UNSUITABILITY DISCHARGES (AND NUMBER)*			
AFQT Category	Felony	Misdemeanor	All PLEs	Number of Unsuitability Discharges in AFQT Category
Category I	7.5 (35)	39.2 (183)	46.7 (218)	467
Category II	13.3 (513)	35.6 (1,374)	49.0 (1,887)	3,855
Category IIIA	15.6 (459)	35.5 (1,042)	51.2 (1,501)	2,934
Category IIIB	14.0 (554)	29.9 (1,182	43.8 (1,736)	3,965
Category IV	13.9 (183)	26.6 (349)	40.5 (532)	1,314

* Percentage of unsuitability discharges is calculated as follows: The number of personnel with a pre-service legal encounter, in each AFQT category, who received an unsuitability discharge, divided by the number of personnel in the AFQT who received an unsuitability discharge.

Source: Derived from data provided by the Defense Manpower Data Center.

Table 8. Number and Percentage of California Recruits by High School Graduation Status and PLE Category, 1982-1989 Cohorts (Combined)

PERCENTAGE OF PLEs (AND NUMBER

Grad Category	PLEs				
	Felony	Misdemeanor	Total	No PLE	Total
High School Graduates	6.3 (2,643)	25.1 (10,485)	31.4 (13,128)	68.6 (28,628)	100.00 (41,756)
Non-High School Graduates	13.3 (871)	33.3 (2,178)	46.6 (3,049)	53.4 (3,495)	100.00 (6,544)
Total	7.3 (3,514)	26.2 (12,663)	33.5 (32,123)	66.5 (32,123)	100.00 (48,300)

Source: Derived from data provided by the Defense Manpower Data Center.

In the civilian sector, one might expect to see a higher number of criminal offenders among non-high school graduates than among graduates. But in the Navy, where recruits are carefully screened to enlist only those who possess "desirable" characteristics, one would not expect to find such a high rate of non-graduates with a PLE. The reason for this finding, then, is unclear. It may be due to the difficulty in obtaining information on the pre-service offense histories of prospective recruits. Yet, among recruits whose history was at least partially disclosed (not displayed in tables)--that is, those who received a moral waiver--the proportion of non-high school graduates (25 percent) with a criminal offense is still 5 percentage points higher than the proportion of high school graduates with a criminal offense. It could be that non-high school graduates who receive a waiver have a higher proportion of less severe offenses. Further research in this area would be necessary to explain this finding.

This study supports the findings of early studies in that recruits who have a high school diploma have a lower rate of unsuitability discharge than do recruits who have not graduated from high school. Table 9 displays the unsuitability discharge rate of recruits by high school graduation status and offense category. In every offense category, a non-high school graduate is 17 to 22 percentage points more likely than a graduate to receive an unsuitability discharge before completing his or her first term of enlistment.

What is most interesting is the information found when comparing recruits who have a similar graduation status but a different PLE background. Among high school graduates, for example, those with an offense history have an unsuitability discharge rate that is 14 percentage points higher than their counterparts who have no offense history. Among non-high school graduates, too, the difference between those with and without a PLE history is almost the same, 13 percentage points.

Recruits with a pre-service felony offense have the highest unsuitability discharge rates, when controlling for educational background. High school graduates with a felony PLE have an unsuitability discharge rate of more than 45 percent. This is 27 percentage points higher than the unsuitability discharge rate for high school graduates with no PLE history. The unsuitability discharge rate for non-high school graduates with a felony PLE is 62 percent. This is 22 percentage points higher than the discharge rate of non-high school graduates with no PLE history.

These results show that there are still great differences between the discharge rates of high school graduates and non-graduates regardless of a recruit's pre-service offense history. However, the results also indicate that the differences between graduates and non-graduates lessen among recruits with an offense history. Even more importantly, the unsuitability discharge rates for both high school graduates and non-graduates increase to what should be considered an unacceptable level as the severity of an offense increases.

Table 9. Unsuitability Discharge Rate of Recruits by High School Graduation Status and PLE Category, 1982-1989 Cohorts (Combined)

Grad Status Category	PERCENT (AND NUMBER) DISCHARGED FOR UNSUITABILITY*			
	Felony	Misdemeanor	All PLEs	No PLE
High School Graduates	45.4 (1,200)	29.1 (3,054)	32.4 (4,254)	18.3 (5,245)
Non-High School Graduates	62.5 (544)	49.4 (1,076)	53.1 (1,620)	40.5 (1,416)

*Unsuitability discharge rate is calculated as follows: The number of personnel in each PLE and education category who received an unsuitability discharge, divided by the number of personnel in that PLE and education category.

Source: Derived from data provided by the Defense Manpower Data Center.

D. RACE/ETHNICITY

As mentioned previously, the effect of race/ethnicity on an individual's likelihood of being discharged before the completion of the first term is not clearly established. Although Hispanics and other non-black minorities are relatively less likely than white recruits to be discharged before completing their first term of enlistment, attrition studies of blacks in the military have been inconsistent. This analysis further divided the race/ethnicity categories by PLE status to see what differences occur when a person's arrest history is taken into account.

Initial examination of the data revealed that 73 percent of all California recruits in the sample with a PLE are white, 12 percent are black, 11 percent are Hispanic, and 4 percent are classified as other minorities. One would expect to find that the majority of recruits with previous arrest histories would be white since the vast majority of all recruits are white. Table 10 shows the number and percentage of recruits from different racial/ethnic groups according to their arrest history.

Table 10. Number and Percentage of California Recruits with a Pre-Service Legal Encounter (PLE) by Racial/Ethnic Group and PLE Category, 1982-1989 Cohorts (Combined)

PERCENTAGE OF PLEs (AND NUMBER)

Racial/Ethnic Group	PLEs				
	Felony	Misdemeanor	Total	No PLEs	Total
White	7.9 (2,435)	30.3 (9,352)	38.2 (11,787)	61.8 (19,073)	100.00 (30,860)
Black	12.5 (722)	20.3 (1,177)	32.8 (1,899)	67.2 (3,899)	100.00 (5,798)
Hispanic	4.9 (300)	25.0 (1,527)	30.0 (1,827)	70.0 (4,271)	100.00 (6,098)
Other Minority*	1.0 (57)	10.9 (607)	12.0 (664)	88.0 (4,880)	100.00 (5,544)

*Other minority includes American Indians, Alaskan Natives, Asian/Pacific Islander and all other minorities not included in the Black and Hispanic categories.

Source: Derived from data provided by the Defense Manpower Data Center.

It is interesting to note that, not only did whites have the greatest number of PLE recruits, but whites also have the largest proportion of recruits with an arrest history. More than 38 percent of all white recruits have an arrest history. This is 6 percentage points higher than the proportion of blacks (32 percent), 8 percentage points higher than the proportion of Hispanics (30 percent), and 26 percentage points higher than the proportion of other minorities (12 percent) with an arrest history.

Although a larger percentage of whites have an arrest history, blacks are relatively more likely to have a felony PLE background. More than 12 percent of blacks have a felony arrest history. This is almost 5 percentage points higher than the rate for whites (8 percent), more than 7 percentage points higher than the rate for Hispanics (5 percent), and more than 12 percentage points higher than that of other minorities (1 percent).

In reviewing Table 11, which shows the unsuitability discharge rates of each racial/ethnic group by PLE category, one can see that blacks have a higher unsuitability discharge rate in every PLE category. However, the unsuitability discharge rates for blacks and recruits in other racial/ethnic categories differ greatly depending on whether one looks at recruits with a PLE history or those without a PLE history.

As seen in Table 11, blacks with a PLE have an unsuitability discharge rate of almost 50 percent. This is 15 percentage points higher than the rate for whites (35 percent). The discharge rate for Hispanics with a PLE is about 37 percent, while the rate for other minorities is lowest at 24 percent.

The discharge rate differences between racial/ethnic groups are considerably smaller for recruits who have no PLE history. For example, black recruits without an arrest history have an unsuitability discharge rate of 24 percent. That is less than half the discharge rate for blacks with an arrest history; and it is only 2 to 3 percentage points higher than the unsuitability discharge rates for whites and Hispanics, respectively, who have no arrest record. It is uncertain as to why the differences in unsuitability discharge rates between racial/ethnic groups are larger for recruits with a PLE history. To fully explain this, further research would be required.

Table 11. Unsuitability Discharge Rate of Recruits from California by Racial/Ethnic Group and PLE Category, 1982-1989 Cohorts (Combined)

Racial/Ethnic Group	PERCENT (AND NUMBER) DISCHARGED FOR UNSUITABILITY[a]			
	Felony	Misdemeanor	All PLEs	No PLE
White	47.8 (1,165)	31.5 (2,942)	34.9 (4,107)	22.2 (4,235)
Black	58.6 (423)	43.8 (516)	49.5 (939)	24.4 (950)
Hispanic	45.7 (137)	34.7 (530)	36.5 (667)	21.3 (909)
Other Minority[b]	33.3 (19)	23.4 (142)	24.3 (161)	11.6 (567)

[a]Unsuitability discharge rate is calculated as follows: The number of personnel in each PLE and Racial Ethnic group who received an unsuitability discharge, divided by the number of personnel in that PLE and Racial Ethnic group.

[b]Other minority includes American Indians, Alaskan Natives, Asian/Pacific Islander and all other minorities not included in the black and Hispanic categories.

Source: Derived from data provided by the Defense Manpower Data Center.

E. OCCUPATION CATEGORIES

The data were divided into nine occupational categories to analyze attrition behavior by this measure. (The occupational categories are defined in Chapter 3, based on Department of Defense definitions.) Cross-tabulation analysis was complicated due to a bias that exists when categorizing personnel into the Non-Occupational (NONOCC) group. A relatively large number of personnel are

discharged during boot camp, or at some other point in the Navy's initial training "pipeline," and are permanently placed in the NONOCC category even though they may have been scheduled to take a job in one of the other eight categories. This procedure inflates the unsuitability discharge rate for the NONOCC category. The unsuitability discharge rates for the other eight categories are lower than one would expect because these categories include only recruits making it through the Navy's initial training phases.

Table 12 shows unsuitability attrition rates, total attrition rates, and unsuitability as a percent of total attrition by the different job categories. As seen in Table 12, the NONOCC category is the only grouping where the unsuitability attrition rate (52 percent) exceeds the Navy-wide unsuitability attrition rate (26 percent). This is attributed to the problem in identifying the job categories of recruits who have been discharged before actual job assignment. However, comparisons may still be made between the eight occupational categories, realizing that these are only unsuitability attrition rates for recruits who have made it through the Navy's initial training phase.

The importance of unsuitability attrition becomes apparent when one understands the relationship between unsuitability attrition and total attrition. As seen in Table 12, unsuitability attrition accounts for almost 72 percent of total attrition Navy-wide. Among recruits in the NONOCC category, 70.5 percent of total attrition is unsuitability attrition. For the other eight categories, or once a recruit has made it through the Navy's initial training phases, unsuitability attrition still accounts for 77 percent of total attrition.

Examining the composition of the job categories in terms of arrest history reveals very little. Table 13 shows the percentage of recruits with pre-service legal encounters for each job category. As seen here, the Craftsman category has the highest proportion of recruits with a PLE background at 38 percent. This is not surprising since it also had the second-highest unsuitability attrition rate of the eight

Table 12. Unsuitability Attrition Rates, Total Attrition Rates, and Unsuitability as a Percent of Total Attrition for California Recruits by Job Category, 1982-1989 Cohorts (Combined)

Occupational Category	PERCENT DISCHARGED[a] Unsuitability Attrition[b]	Total Attrition[c]	Unsuitability as a Percent of Total Attrition
Seamanship	11.7	16.4	71.3
Electronic Equipment Repair	12.9	18.3	70.5
Communication & Intelligence Specialist	16.8	22.8	73.7
Healthcare	9.9	16.3	60.7
Technical & Allied Specialist	9.5	16.2	58.6
Functional Support & Administration	11.8	17.5	67.4
Equipment Repair	13.9	17.6	79.0
Craftsman	17.4	22.5	77.3
Service & Supply Handler	21.8	27.0	80.7
Non-Occupational	52.1	73.9	70.5
Navy-wide	26.0	36.2	71.8

[a]Percent discharged is calculated as follows: The number of personnel in the job category that attrited for reasons associated with the attrition category, divided by the number of personnel in the job category.

[b]Unsuitability attrition is defined as leaving the Navy with an Interservice Separation Code (ISC) of 61-88 or 101-102 prior to completion of the first term of enlistment.

[c]Total attrition is defined as leaving the Navy prior to completion of the first term of enlistment.

Source: Derived from data provided by the Defense Manpower Data Center.

Table 13. Percentage of Pre-Service Legal Encounter (PLE) Recruits Among California Recruits by Job Category and PLE Category, 1982-1989 Cohorts (Combined)

Occupational Category	PERCENTAGE OF PLEs (AND NUMBER)* Felony	Misdemeanor	All PLEs	Total Number in Job Category
Seamanship	5.6 (181)	26.1 (848)	31.6 (1,029)	3,255
Electronic Equipment Repair	5.1 (257)	27.3 (1,368)	32.5 (1,625)	5,005
Communication & Intelligence Specialist	6.5 (241)	25.5 (947)	32.0 (1,188)	3,718
Healthcare	4.3 (121)	27.4 (770)	31.8 (891)	2,806
Technical & Allied Specialist	4.9 (14)	25.0 (71)	29.9 (85)	284
Functional Support & Administration	5.5 (166)	20.6 (624)	26.0 (790)	3,036
Equipment Repair	5.8 (631)	26.9 (2,937)	32.8 (3,568)	10,901
Craftsman	6.5 (145)	31.6 (705)	38.1 (850)	2,231
Service & Supply Handler	6.2 (119)	19.1 (364)	25.3 (483)	1,906
Non-Occupational	10.8 (1,639)	26.6 (4,029)	37.4 (5,668)	15,158
Total	7.3 (3,514)	20.6 (12,663)	33.5 (16,177)	48,300

*Percentage of PLEs is calculated as follows: The number of personnel in the job category that has a Pre-service legal encounter in the PLE category, divided by the number of personnel in the job category.

Source: Derived from data provided by the Defense Manpower Data Center.

occupational categories. The Service and Supply Handler category has the lowest proportion of recruits with a pre-service legal encounter (25 percent). This was surprising, since the Service and Supply Handler category had the highest unsuitability attrition rate of the eight occupational groupings. If arrest histories are likely to increase unsuitability discharges, one would expect to find a very high unsuitability discharge rate for recruits with an arrest history in this category when compared with the remaining occupational categories.

Table 14 was created to investigate this theory. Table 14 displays the unsuitability discharge rates, by job category and PLE category. As seen here, the unsuitability discharge rate for PLE recruits in the Service and Supply Handler category is 37 percent, at least 12 percentage points higher than the rate in any of the other seven occupational categories. Recruits in this category with no arrest history also have the highest unsuitability discharge rate when compared with similar recruits in other categories. Further research would be required to find out why the Service and Supply Handler category has such a high unsuitability discharge rate, but it may be that these positions, being non-technical, tend to attract recruits who have less educational skills and lower aptitude test scores than recruits drawn to other occupational areas.

Table 14 also reveals a difference in unsuitability discharge rates when comparing recruits who disclose their arrest history (recruits with a moral waiver) with recruits whose arrest history is hidden (recruits with a moral waiver that does not match his or her arrest history). In every occupational category, the unsuitability discharge rate for recruits with a hidden PLE is higher than the unsuitability discharge rate for recruits who disclosed their PLE. Navy-wide, the unsuitability discharge rate for recruits with a hidden PLE (44 percent) is 12 percentage points higher than the unsuitability discharge rate for recruits with a disclosed PLE (32 percent).

Table 14. Unsuitability Discharge Rates for California Recruits by Pre-Service Legal Encounter Status (PLE), Disclosure Status, and Job Category, 1982-1989 Cohorts (Combined)

PERCENT (AND NUMBER) DISCHARGED FOR UNSUITABILITY*

Occupational Category	Pre-Service Legal Encounter			No PLE History
	Hidden	Disclosed	Total	
Seamanship	20.0 (71)	14.7 (99)	16.5 (170)	9.4 (210)
Electronic Equipment Repair	21.4 (113)	16.6 (182)	18.2 (295)	10.4 (353)
Communication & Intelligence Specialist	30.9 (139)	21.0 (155)	24.8 (294)	13.1 (332)
Healthcare	22.9 (47)	12.8 (88)	15.2 (135)	7.5 (143)
Technical & Allied Specialist	23.1 (6)	8.5 (5)	12.9 (11)	8.0 (16)
Functional Support & Administration	27.1 (75)	20.5 (105)	22.8 (180)	8.0 (179)
Equipment Repair	26.1 (295)	19.0 (463)	21.2 (758)	10.3 (754)
Craftsman	27.5 (84)	22.8 (124)	24.5 (208)	13.1 (181)
Service & Supply Handler	44.6 (86)	32.4 (94)	37.3 (180)	16.5 (235)
Non-Occupational	66.9 (1,786)	61.9 (1,857)	64.3 (3,643)	44.9 (4,258)
Navy-wide	44.0 (2,702)	31.6 (3,172)	36.3 (5,874)	20.7 (6,661)

*Unsuitability rate calculated as follows: The number of personnel in the PLE status category, that received an unsuitability discharge, divided by the number of personnel having that PLE status in the job category.

Source: Derived from data provided by the Defense Manpower Data Center.

Cross-tabulations provide limited information as to whether being assigned to a particular occupational category increases or decreases one's likelihood of receiving an unsuitability discharge. To examine this question further, these variables are included in the second of this study's two logit models.

F. LOGIT MODEL RESULTS

Logit Model 1 (previously described in Chapter III) was initially used to determine whether a pre-service legal encounter increases an individual's likelihood of receiving an unsuitability discharge. The results of this logit analysis are contained in Table 15. The predicted probability was calculated for each variable by multiplying the coefficient estimate by P(1-P)(100), where P is the probability of receiving an unsuitability discharge (Gujarati, 1995, p. 38).

Analysis of Logit Model 1 reveals that all variables in the model, with the exception of NUMDEPEN, are significant and affect unsuitability discharges. Five of the variables (HISPANIC, OTHMIN, HSDIPLOM, AFQTPCT, and MARRIED) have a negative effect on the variable UNSUIT. These variables tend to decrease one's likelihood of receiving an unsuitability discharge.

The variable with the greatest negative impact on whether an individual receives an unsuitability discharge is HSDIPLOM. An enlistee with a high school diploma is more than 19 percentage points less likely to receive an unsuitability discharge than an enlistee without a high school diploma. This supports previous studies showing that high school diploma status is one of the most important predictors of first-term attrition.

The other six significant variables (MALE, BLACK, AGEENTRY, AFQTPCT, FELONY and MISDEM) have a positive effect on the variable UNSUIT. These variables tend to increase one's likelihood of receiving an unsuitability discharge. The variable NUMDEPEN was not statistically significant.

Table 15. Logit Results for Logit Model 1: Predicted Probabilities of Receiving an Unsuitability Discharge

Variable	Coefficient	Wald Chi-sq	Predicted Probability
MALE	0.4226	121.5537	8.12*
BLACK	0.2391	51.2498	4.59*
HISPANIC	-0.0785	5.5228	-1.51**
OTHMIN	-0.7902	314.7669	-15.18*
HSDIPLOM	-1.0020	1206.0695	-19.25*
AGEENTRY	0.0118	9.8700	0.23*
AFQTPCT	-0.0086	234.0271	-0.16*
MARRIED	-0.1161	4.8406	-2.23**
NUMDEPEN	0.0466	0.9193	0.90
FELONY	1.0578	776.5917	20.32*
MISDEM	0.4972	407.0060	9.55*

* significant at .01
** significant at .05

Both of the two PLE variables increase an individual's likelihood of receiving an unsuitability discharge. Having a felony PLE has the greatest positive impact of all variables in the model on the variable UNSUIT. Enlistees who have a felony arrest history are 20 percentage points more likely to receive an unsuitability discharge than are recruits with no PLE history. Having a Misdemeanor PLE also has a large impact on one's likelihood of being discharged for unsuitability. Enlistees with a misdemeanor PLE are almost 10 percentage points more likely to receive an unsuitability discharge than are recruits with no PLE history.

A second logit model, Logit Model 2 (also previously described in Chapter III) was used to determine the effects of PLEs on first term unsuitability attrition, while controlling for occupation, as well as the variables included in Logit Model 1. The results of this logit analysis are shown in Table 16. The predicted probabilities were calculated as previously described.

Table 16. Logit Results for Logit Model 2: Predicted Probabilities of Receiving an Unsuitability Discharge

Variable	Coefficient	Wald Chi-sq	Predicted Probability
MALE	0.5778	196.3934	11.10*
BLACK	0.2265	38.1671	4.35*
HISPANIC	-0.1168	10.3645	-2.24*
OTHMIN	-0.7232	233.2041	-13.89*
HSDIPLOM	-0.8120	654.8888	-15.60*
AGEENTRY	0.0128	9.9339	0.25*
AFQTPCT	-0.0005	0.7181	-0.10
MARRIED	-0.0168	0.0867	-0.32
NUMDEPEN	-0.0649	1.5103	-1.25
SEAMNSHP	-0.1934	9.5823	-3.72*
EEREPAIR	-0.0748	2.0880	-1.44
COMINTSP	0.1796	11.3705	3.45*
HLTHCARE	-0.2578	13.3714	-4.95*
TECHSPEC	-0.3962	3.6484	-7.61***
SUPADMIN	-0.0685	1.1259	-1.32
NONOCC	1.9034	3223.7555	36.56*
CRAFTMEN	0.2273	12.6020	4.37*
SERVSUP	0.6808	109.9046	13.08*
FELONY	0.9606	525.9212	18.45*
MISDEM	0.5389	400.7767	10.35*

* significant at .01
** significant at .05
***significant at .10

Analysis of Logit Model 2 reveals that the variables FELONY and MISDEM are still significant when controlling for occupation. The predicted probability that an enlistee with a felony PLE would receive an unsuitability discharge is 18.45, only two percentage points lower than the predicted probability found in Logit Model 1. The predicted probability that an enlistee with a misdemeanor or lesser PLE would

receive an unsuitability discharge is 10.35, less than one percentage point higher than the predicted probability found in Logit Model 1.

Evaluation of the predicted probabilities for the different job categories is complicated, as previously discussed, because of problems found in designating enlistees as NONOCC. However, given that the enlistee survived the initial training phase and was assigned into one of the eight occupational categories, some observations and comparisons between occupational categories, as pertaining to predicted probabilities of receiving an unsuitability discharge, can be made.

Enlistees in the SEAMNSHP and HLTHCARE categories are less likely to receive an unsuitability discharge than those in the EQREPAIR category, which was the base case in this model. Enlistees in the COMINTSP, CRAFTMEN and SERVSUP categories are more likely than those in the EQREPAIR category to receive an unsuitability discharge. The EEREPAIR, SUPADMIN, and TECHSPEC variables were not significant at the .05 level.

The results from Logit Model 2 should be viewed with caution since all recruits discharged during the initial training phase are placed in the NONOCC category, regardless of the occupation for which they may have been enlisted. However, the model does illustrate that FELONY and MISDEM enlistees have a high risk of receiving an unsuitability discharge, taking into account occupational classification.

V. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

A. SUMMARY AND CONCLUSIONS

Examination of the data reveal that 16,177 enlistees--33 percent of all recruits entering the Navy from the State of California between 1982 and 1989--had at least one pre-service legal encounter. Of these enlistees, almost 38 percent did not obtain a moral waiver that matched his or her arrest history. Failure to disclose pre-service arrest history may be the norm for enlistees with a felony arrest background. The data show that 98 percent of enlistees with a felony arrest history failed to obtain a felony moral waiver. This suggests that the current moral waiver process, which relies on self-disclosure, may be ineffective in identifying recruits with a pre-service arrest history.

All AFQT categories have a relatively high percentage of recruits with a pre-service arrest history. Furthermore, recruits with a PLE have a higher unsuitability discharge rate than those without a PLE in every AFQT category. This study finds little advantage in being more lenient in granting moral waivers to prospective recruits in the higher AFQT categories. The unsuitability discharge rate for recruits without a PLE, even in the lowest AFQT category (Category IV), is lower than the unsuitability discharge rate for recruits with a PLE in the highest AFQT category (Category I).

Unsuitability discharge rates for persons with a PLE range from 23 to 42 percent across the AFQT categories, a 19-percentage-point spread. Unsuitability discharge rates for enlistees with no arrest history range from 16 to 22 percent across the AFQT categories, only a 6-percentage-point spread. This suggests that the effect of having a prior arrest history may be stronger than a person's AFQT score on the likelihood of receiving an unsuitability discharge.

As expected, having a high school diploma is an important characteristic when looking at an enlistee's likelihood of being discharged for unsuitability. A higher percentage of recruits with an arrest history are found among non-graduates. Likewise, non-graduates, with or without an arrest history, have an unsuitability discharge rate much larger than that of high school graduates with similar PLE category backgrounds. High school graduates with an arrest history were found to have an unsuitability discharge rate 78 percent higher than that of graduates without an arrest history. This suggests that having an arrest history increases one's likelihood of unsuitability attrition, even among high school graduates.

Race/Ethnicity proved to be an interesting demographic variable when looking at unsuitability discharge rates. For enlistees with no arrest history, very little difference was found between the unsuitability discharge rates of blacks (24 percent), whites (22 percent), and Hispanics (21 percent). However, among recruits with a PLE history, the unsuitability discharge rate for blacks (50 percent), was considerably higher than the unsuitability discharge rate for whites (35 percent) and Hispanics (37 percent). This suggests that the effects of having a PLE on one's likelihood of unsuitability attrition is greater among blacks than it is among whites or Hispanics. The reason for this is unclear. Further research on the severity of crimes, multiple instance of arrest, or backgrounds of the individuals involved might help to explain these differences.

Cross-tabulation analysis provides limited information as to whether occupational categories affect one's likelihood of receiving an unsuitability discharge. This portion of the analysis was hampered by the fact that Navy personnel who have been discharged before completing training are permanently placed in the NONOCC category. When looking at unsuitability attrition rates, the analysis shows that enlistees with a PLE have a higher unsuitability discharge rate than those with no arrest history, in every job category. However, caution should be used when drawing

conclusions from this portion of the analysis because of the large number of individuals who were discharged during the training phase and classified as NONOCC.

Logit model analysis was used to determine the predicted probabilities of receiving an unsuitability discharge for enlistees with a felony or misdemeanor history, taking into account other variables that have been shown in the past to influence attrition. The logit results show that California enlistees with a felony are 20 percentage points more likely to receive an unsuitability discharge than are those with no arrest history. Additionally, the study finds that enlistees in the sample with a misdemeanor or lesser charge are 10 percentage points more likely to receive an unsuitability discharge than are those with no arrest history.

A second logit analysis was conducted to control for occupational categories. Inclusion of occupation variables had little impact on changing the predicted probabilities of the FELONY or MISDEM variables. The logit models suggest that recruits with an arrest record are more likely to receive an unsuitability discharge than are those without an arrest record.

B. RECOMMENDATIONS

The results of this study suggest that the Navy's current system for providing moral waivers and reviewing the background of applicants for enlistment is ineffective in identifying persons with a pre-service arrest history. In the California sample, 6,139 recruits--almost two out of every five recruits with a PLE--lacked a moral waiver that matched his or her arrest record.

There are two major problems in trying to ensure that prospective recruits receive an appropriate moral waiver. The first is quite simple. The current moral waiver process relies on self-disclosure by the prospective recruit to obtain the recruit's pre-service arrest history. If the prospective recruit believes that the arrest history is potentially disqualifying, he or she may not be willing to disclose it to the

recruiter. When this happens, a waiver is never sought. If the prospective recruit only discloses part of his or her arrest history, such as a minor legal encounter, he or she will not be accurately evaluated and the wrong waiver may be sought.

To correct this problem with the current moral waiver system, it is important that recruiters obtain accurate information on the backgrounds of applicants. This is especially critical since the study suggests that recruits with a PLE receive unsuitability discharges at a relatively high rate and the likelihood of unsuitability attrition differs by the severity or nature of the offense.

The question then becomes, how does the Navy ensure that recruiters receive accurate information? As this study indicates, the self-disclosure method is not the answer. It is recommended that the military investigate ways to obtain adult and juvenile arrest records on prospective recruits. Access to these arrest records may be the only way to ensure that the backgrounds of recruits can be accurately evaluated.

Obtaining arrest records, however, will not be an easy task. In many states, legal barriers are in place to protect the privacy of individuals. These barriers currently deny recruiters access to the prospective recruit's arrest record. But, laws can be changed. The military needs to work with federal, state, and local governments to find an acceptable solution that would allow accurate screening of prospective recruits in the interest of national security.

The second problem in identifying applicants with a PLE--and those who are likely to be discharged for unsuitability--lies within the moral waiver policy. The Navy requires that moral waivers be sought only for individuals convicted of a crime. If a person is arrested but not convicted, then a moral waiver is not considered necessary.

It is recommended that the Navy reevaluate its policy of requiring a moral waiver only for persons convicted of a crime. This study suggests that the unsuitability discharge rates of enlistees with a pre-service arrest or conviction are

higher than those of enlistees with no arrests. If the Navy's goal is to reduce attrition, prospective recruits with either an arrest or a conviction should be properly screened and evaluated.

As a final word of caution, it is important to realize that arrests or convictions should only be used as a screening tool, as added information on applicants, and not as a barrier to enlistment. Each individual is different. The severity of the offense, the number of offenses, and the time elapsed since the encounter should all be taken into account. Although the study indicates that California recruits with a PLE have an unsuitability discharge rate of 36 percent, it should also be noted that 64 percent of the recruits with a PLE did not receive an unsuitability discharge. The key to having an effective moral waiver process is much more than determining the prospective recruit's past behavior; the key is to be able to determine his or her future behavior. Information on arrests or convictions may aid in predicting future behavior, but many other factors may need to be considered as well. An effective moral waiver system needs to take all possible factors into account--"the whole person"-- when determining a prospective sailor's fitness to serve the Navy and the nation.

LIST OF REFERENCES

Buddin, R., "Analysis of Early Military Attrition Behavior," R-3069-MIL, Santa Monica, CA, Prepared for the Office of the Assistant Secretary of Defense/ Manpower, Installations, and Logistics, July 1984.

COMNAVCRUITCOMINST 1130.8D CH-30, Arlington, VA, Navy Recruiting Command, June 1995.

Cooke, T.W. and Quester, A.O., "What Characterizes Successful Enlistees in the All-Volunteer Force: A Study of Male Recruits in the U.S. Navy," Social Science Quarterly, Vol. 73, No.2, University of Texas Press, June 1992.

Fitz, C.C. and McDaniel, M.A., "Moral Waivers as Predictors of Unsuitability Attrition in the Military," TR-88-006, Monterey, CA, Defense Personnel Research and Education Center, December 1988.

Flyer, E.S., "Recruits With a Preservice Arrest History: Identification, Characteristics, and Behavior on Active Duty," Contract Number DAAL03-91-C-0034, Directorate for Accession Policy, Office of the Assistant Secretary of Defense, February 1995.

Gardner, D.E., "The Relationship of Initial Assignment and Personnel Background Variables to First-Term Enlisted Attrition From the Navy," Monterey, CA, Naval Postgraduate School, December 1980.

Griffin, P., "A First-Term Attrition Severity Index for U.S. Navy Ratings," Monterey, CA, Naval Postgraduate School, January 1981.

Means, B.S., "Moral Standards for Military Enlistment: Screening Procedures and Impact," FR-PRD-183-26, Alexandria, VA, Human Resources Research Organization, November 1983.

Wiskoff, M.F., and Dunipace, N.E., "Moral Waivers and Suitability for High Security Military Jobs, TR-88-011, Monterey, CA, Defense Personnel Security Research and Education Center, December 1988.

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